



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 EAST LAMAR BLVD  
ARLINGTON, TEXAS 76011-4125

May 13, 2011

Mr. David J. Bannister, Vice President  
and Chief Nuclear Officer  
Omaha Public Power District  
Fort Calhoun Station FC-2-4  
P.O. Box 550  
Fort Calhoun, NE 68023-0550

SUBJECT: Fort Calhoun Station – NRC TEMPORARY INSTRUCTION 2515/183  
INSPECTION REPORT 05000285/2011010

Dear Mr. Bannister:

On April 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Fort Calhoun Station, using Temporary Instruction 2515/183, "Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on April 29, 2011, with you and other members of your staff.

The objective of this inspection was to assess the adequacy of actions taken at the Fort Calhoun Station in response to the Fukushima Daiichi Nuclear Station fuel damage event. The results from this inspection, along with the results from similar inspections at other operating commercial nuclear plants in the United States, will be used to evaluate the United States nuclear industry's readiness to respond to a similar event. These results will also help the NRC to determine if additional regulatory actions are warranted.

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report. You are not required to respond to this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Omaha Public Power District

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Sincerely,

*/RA/*

Jeffrey A. Clark  
Chief, Project Branch E  
Division of Reactor Projects

Docket: 50-285  
License: DPR-40

Enclosure: NRC Inspection Report 05000285/2011010  
w/attachment: Supplemental Information

cc w/encl:

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 DRS Deputy Director (Vacant)  
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 Resident Inspector (Jacob.Wingebach@nrc.gov)  
 Branch Chief, DRP/E (Jeff.Clark@nrc.gov)  
 Senior Project Engineer, DRP/E (Ray.Azua@nrc.gov)  
 Project Engineer (Jim.Melfi@nrc.gov)  
 Project Engineer (Chris.Smith@nrc.gov)  
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 Branch Chief, DRS/TSB (Michael.Hay@nrc.gov)  
 Project Manager (Lynnea.Wilkins@nrc.gov)  
 RITS Coordinator (Marisa.Herrera@nrc.gov)  
 Regional Counsel (Karla.Fuller@nrc.gov)  
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 OEmail Resource  
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 DRS/TSB STA (Dale.Powers@nrc.gov)

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SUNSI Rev Compl	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reviewer Initials	JCK
Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	JCK
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**U. S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 05000285

License: DPR-40

Report: 05000285/2011010

Licensee: Omaha Public Power District

Facility: Fort Calhoun Station

Location: 9610 Power Lane  
Blair, NE 68008

Dates: March 23 through April 29, 2011

Inspectors: J. Kirkland, Senior Resident Inspector  
A. Fairbanks, Reactor Inspector

Approved By: Jeffrey Clark, Chief, Project Branch E  
Division of Reactor Projects

## **SUMMARY OF FINDINGS**

IR 05000285/2011010, 03/23/2011 – 04/29/2011; Fort Calhoun Station Temporary Instruction 2515/183 - Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event

This report covers an announced temporary instruction inspection. The inspection was conducted by Resident and Region IV inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

## **INSPECTION SCOPE**

The intent of the temporary instruction is to be a high-level look at the industry's preparedness for events that may exceed the design basis for a plant. The focus of the temporary instruction was on (1) assessing the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, (2) assessing the licensee's capability to mitigate station blackout conditions, (3) assessing the licensee's capability to mitigate internal and external flooding events required by station design, and (4) assessing the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. If necessary, a more specific follow-up inspection will be performed at a later date.

## **INSPECTION RESULTS**

The following table documents the NRC inspection at the Fort Calhoun Station performed in accordance with Temporary Instruction 2515/183. The numbering system in the table corresponds to the inspection items in the temporary instruction.

**03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, committed to as part of NRC Security Order Section B.5.b issued February 25, 2002, and severe accident management guidelines and as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.54(hh). Use Inspection Procedure 71111.05T, "Fire Protection (Triennial)," Section 02.03 and 03.03 as a guideline. If Inspection Procedure 71111.05T was recently performed at the facility the inspectors should review the inspection results and findings to identify any other potential areas of inspection. Particular emphasis should be placed on strategies related to the spent fuel pool. The inspection should include, but not be limited to, an assessment of any licensee actions to:**

Licensee Action	Describe what the licensee did to test or inspect equipment.
<p>a. Verify through test or inspection that equipment is available and functional. Active equipment shall be tested and passive equipment shall be walked down and inspected. It is not expected that permanently installed equipment that is tested under an existing regulatory testing program be retested.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>Station personnel conducted an inspection of equipment that is identified in the station's severe accident management guideline and operational contingency action guideline. The operational contingency action guideline is the station's response procedure which identifies procedures and equipment committed under NRC Security Order Section B.5.b. Active components were tested. Inspection and verification activities conducted in this section included validation of the procedural guidance associated with the components, which are also described in Section b of this table (these procedures and comments will not be repeated in Section b of this table).</p>
	<p>Describe inspector actions taken to confirm equipment readiness (e.g., observed a test, reviewed test results, discussed actions, reviewed records, etc.).</p>
	<p>The inspectors reviewed the test results, records, and discussed actions with several plant operators. The inspectors verified that all active equipment credited in the severe accident management guideline and operational contingency action guideline procedures were located, stored, and maintained per station procedures. Specifically, the inspectors independently reviewed the contents of staged equipment throughout the plant. Additionally, the inspectors reviewed test results for the B.5.b fire truck.</p>

	<p>Discuss general results including corrective actions by licensee.</p> <p>Condition Reports were written for any deficiencies and for any procedure or material enhancements that were discovered. Specific vulnerabilities and deficiencies noted were: (1) severe accident management guideline equipment is not maintained through a preventive maintenance process –actions were assigned to develop regular inventories, inspections, and tests as appropriate; (2) one method of venting containment (personnel airlock door window removal) was not determined to be viable, however additional compensatory measures and capabilities have been identified; (3) one method of providing reactor coolant system makeup from the spent fuel pool was not determined to be credible-multiple alternate paths exist and improved procedure guidance may make this path credible again; (4) one degraded component, fire pump FP-154, is credited in the flow path for three of the methods of using fire protection water to reduce offsite releases however, many alternatives exist and this equipment was previously identified and is scheduled for repair in early June, 2011; and (5) several procedure changes as identified in condition reports to provide enhancements and correct minor editorial changes (including plant labeling).</p>
<p>Licensee Action</p>	<p>Describe the licensee's actions to verify that procedures are in place and can be executed (e.g. walkdowns, demonstrations, tests, etc.)</p>
<p>b. Verify through walkdowns or demonstration that procedures to implement the strategies associated with B.5.b and 10 CFR 50.54(hh) are in place and are executable. Licensees may choose not to connect or operate permanently installed</p>	<p>In addition to the procedure validations and walkthroughs that were performed in conjunction with the equipment inspections in section 1a of this table, additional procedures were exercised in response to this area of inspection. Severe accident management guideline and operational contingency action guideline entry and diagnostic sections, as well as decision-making guidance, were verified through a detailed tabletop exercise to ensure that the procedures were executable. Additional procedure walkdowns were conducted for procedures which were implemented through the guidance in the severe accident management guideline or operational contingency action guideline guidance.</p>

<p>equipment during this verification.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>Describe inspector actions and the sample strategies reviewed. Assess whether procedures were in place and could be used as intended.</p> <p>The inspectors reviewed all the severe accident procedures and guidelines to ensure that the appropriate equipment, training, staging, and time lines could be followed. The inspectors determined that the licensee's procedures were in place, effective, had been recently trained on, and could be implemented as intended. The inspectors walked down several strategies with plant operators to ensure that the operators knew where the equipment was located, how to operate the equipment, and the ease of use of the equipment.</p> <p>Discuss general results including corrective actions by licensee.</p> <p>No deficiencies or weaknesses were identified by the licensee other than those identified in Section 1a of this table.</p>
<p>Licensee Action</p>	<p>Describe the licensee's actions and conclusions regarding training and qualifications of operators and support staff.</p>
<p>c. Verify the training and qualifications of operators and the support staff needed to implement the procedures and work instructions are current for activities related to Security Order Section B.5.b and severe accident management guidelines as required by 10 CFR 50.54 (hh).</p>	<p>The licensee verified the current training and qualification for operators and support staff to ensure all training requirements had been completed. This verification included all members of the Emergency Response Organization who are responsible for implementing sections and/or guidance identified in the station's response to sections 1a and 1b of this table. The verification also included some offsite response agencies. The number of qualified personnel and qualification/training requirements for security personnel was also verified.</p>



	Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff.
	The inspectors reviewed the training records of all plant and licensed operators and of all emergency response roster personnel to ensure that they were current with their training window. The inspectors interviewed personnel to ensure they knew where the equipment was located, how to operate the equipment, the ease of use of the equipment, and could complete the procedures as written.
	Discuss general results including corrective actions by licensee.
	The licensee identified that some licensed operators were missing some training requirements from Rotation 11-1, and some severe accident management guideline training has exceeded the 3-year requirement for some licensed operators. Condition Report 2011-2132 was written to ensure training is scheduled as soon as possible after the current refueling outage.
Licensee Action	Describe the licensee's actions and conclusions regarding applicable agreements and contracts are in place.
d. Verify that any applicable agreements and contracts are in place and are capable of meeting the conditions needed to mitigate the consequences of these events.  This review should be done for a reasonable sample of mitigating strategies/equipment.	All contracts and agreements associated with the severe accident management guideline; the operational contingency action guideline; the station's radiological emergency response plan; and the station's security plan was verified by direct contact with each organization. Communication with each agency verified that the terms of the agreement or contract were current, that any committed equipment was verified to be available, and that the contact information for each agency was correct.
	For a sample of mitigating strategies involving contracts or agreements with offsite entities, describe inspectors actions to confirm agreements and contracts are in place and current (e.g., confirm that offsite fire assistance agreement is in place and current).

	<p>The inspectors confirmed that agreements with offsite responders are current and the equipment and capabilities of the offsite responders remain valid. Specifically, the inspectors reviewed the contracts with two vendors supplying emergency diesel generators, and two fire departments.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>No deficiencies or weaknesses were identified with the applicable agreements or contracts. The licensee did identify that the operational contingency action guideline would need to be updated to identify new equipment purchases associated with operational contingency action guideline response contracts.</p>
<p>Licensee Action</p>	<p>Document the corrective action report number and briefly summarize problems noted by the licensee that have significant potential to prevent the success of any existing mitigating strategy.</p>
<p>e. Review any open corrective action documents to assess problems with mitigating strategy implementation identified by the licensee. Assess the impact of the problem on the mitigating capability and the remaining capability that is not impacted.</p>	<p>The licensee generated five condition reports related to the licensee's capability to mitigate conditions that result from beyond design basis events. They did not identify any issues that would impact the mitigating capabilities of the strategies per the severe accident management guidelines of B.5.b procedures.</p> <p>Condition Report 2011-2078 identified that all fire brigade gear was not present in the fire brigade storage area. This condition report was written to perform gear inventory once all gear has been returned, and to use the loss of gear as an OE topic in the next fire brigade rotation</p> <p>Condition Report 2011-2102 identified deficiencies in the severe accident management guideline procedures. These were: (1) spent fuel pool cooling pumps as a potential source of makeup water to the reactor coolant system; (2) flooding the containment cooling and filtering units with containment spray; and (3) jumper installation for establishing a containment vent path were determined to be not viable. This Condition Report was written to revise the severe accident management guideline procedures.</p>

	<p>Condition Report 2011-2132 identified that some licensed operators are missing some training requirements from Rotation 11-1, and some severe accident management guideline training has exceeded the 3-year requirement for some licensed operators. This condition report was written to ensure training is scheduled as soon as possible after the current refueling outage.</p> <p>Condition Report 2011-2164 identified that one method of venting containment described in the operational contingency action guideline, was not viable. This condition report was written to remove the procedure which described the process for venting containment by removing the personnel airlock-door sight glass. It was noted that there are other methods of venting containment described in the operational contingency action guideline.</p> <p>Condition Report 2011-2165 identified that severe accident management guideline equipment is not maintained or inventoried on a routine basis. This Condition Report was written to create an inventory and preventive maintenance program.</p>
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**03.02 Assess the licensee's capability to mitigate station blackout conditions, as required by 10 CFR 50.63, "Loss of All Alternating Current Power," and station design, is functional and valid. Refer to Temporary Instruction 2515/120, "Inspection of Implementation of Station Blackout Rule Multi-Plant Action Item A-22" as a guideline. It is not intended that Temporary Instruction 2515/120 be completely re-inspected. The inspection should include, but not be limited to, an assessment of any licensee actions to:**

Licensee Action	Describe the licensee's actions to verify the adequacy of equipment needed to mitigate a station blackout event.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	<p>The licensee verified its capability to respond to a station blackout events through plant walkdowns and by performance of a station blackout scenario in the simulator. In addition, the licensee verified that all the required staged equipment was accounted for or available.</p> <p>The licensee reviewed 10 CFR 50.63, Regulatory Guide 1.155 and NUMARC 87-00 to ensure its basis for actions for a station blackout. Fort Calhoun's response to station blackout is reliant upon availability of one of three offsite power sources (161KV, 345KV, or 13.8KV) or availability of either diesel generator. However, the heat sink can be maintained</p>

	<p>throughout this event as long as a water source is available, since the station has an installed diesel engine-driven auxiliary feed water pump, a steam-driven emergency feedwater pump, and the ability to relieve steam through main steam-safety valves without power. Instrument air or backup nitrogen accumulators provide motive force to maintain system alignments during the time without ac power to the station.</p>
	<p>Describe inspector actions to verify equipment is available and useable.</p>
	<p>The inspectors walked down diesel generator 2 looking for deficiencies that might call into question the operability of the diesel (diesel generator 1 was out of service for maintenance during a refueling outage). Additionally, the inspectors walked down the diesel-driven auxiliary feedwater pump, FW-54. The inspectors reviewed the most recent surveillance test data for each diesel generator and FW-54, and searched through the corrective action program database for items that could impact the operability of this equipment.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>No vulnerabilities were discovered; however, the licensee identified the following enhancements: (1) isolation of reactor coolant pump seal bleed-off flow will prolong reactor cooling system inventory; (2) step to secure radiological releases due to loss of monitor power; (3) step to refer to the operational contingency action guideline for more rapid deployment of materials before engineering release order is activated; and (4) ability to “black-start” the emergency diesel generators needs improved engineering guidance and procedures to accomplish this task.</p>
<p>Licensee Action</p>	<p>Describe the licensee’s actions to verify the capability to mitigate an SBO event.</p>

b. Demonstrate through walkdowns that procedures for response to an station blackout are executable.	Fort Calhoun's response to station blackout is contained primarily in two emergency operating procedures: EOP-07, "Station Blackout," and EOP-20, "Functional Recovery Procedure," Resource Section MVA-AC, "Maintenance of Vital Auxiliaries - AC." These two procedures were demonstrated in the simulator using scenario-based validation. Emergency Operating Procedure EOP-07 was also walked down in the plant by an operating crew, as were any attachments for restoring power via offsite power and or diesel generators.
	Describe inspector actions to assess whether procedures were in place and could be used as intended.
	The inspectors performed an independent walkdown of EOP-07 to verify that the procedures were executable. Additionally, the inspectors interviewed operators regarding the strategies involved in implementing the station blackout procedure.
	Discuss general results including corrective actions by licensee.
	The licensee identified that there should be a step to isolate reactor coolant pump controlled bleed-off to maximize reactor coolant system inventory for a sustained loss of power, and a step should be added to secure radiological releases, as there would be no sample pump for the stack monitor and no dilution flow following a loss of power.

**03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to Inspection Procedure 71111.01, "Adverse Weather Protection," Section 02.04, "Evaluate Readiness to Cope with External Flooding" as a guideline. The inspection should include, but not be limited to, an assessment of any licensee actions to verify through walkdowns and inspections that all required materials and equipment are adequate and properly staged. These walkdowns and inspections shall include verification that accessible doors, barriers, and penetration seals are functional.**

Licensee Action	Describe the licensee's actions to verify the capability to mitigate existing design basis flooding events.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	<p>Inspections were performed of the equipment required for protection against external flooding in response to this temporary instruction. The station's response strategy consists of installation of flood protection barriers in doorways and openings to vital areas up to a level of 1,014 feet above mean sea level. This level is consistent with the design basis for the station's flooding program as defined in the Updated Safety Analysis Report. Guidance for installation of these barriers is contained in the abnormal and emergency procedures associated with flooding, and were found to be adequate by station personnel. All equipment required for sandbagging was functionally tested or inspected, and found to be adequate, staged, and available. This consists of two sandbagging machines stored in the warehouse area, 27,000 sandbags stored in the warehouse, and adequate sand stored onsite. Temporary barriers (flood doors) were physically installed in each location identified in the flooding response procedures. All barriers were successfully installed and found to be fully functional, and no significant deficiencies were noted during the installation of these barriers.</p>
	<p>Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.</p>
	<p>The inspectors reviewed the Updated Safety Analysis Report to verify that procedures were implemented to satisfy the license basis flood level. The inspectors performed independent walkdowns of the areas where external flooding could result in the biggest impact. The inspectors reviewed the procedures involved in sandbagging and floodgate installation, observed the installation of some floodgates, and reviewed photographs of the other floodgates installed. Additionally, the inspectors reviewed several recent event notices regarding flooding penetration vulnerabilities, and walked down these particular vulnerabilities to ensure the licensee had corrected these penetration vulnerabilities.</p>
	<p>Discuss general results including corrective actions by licensee.</p>

	<p>The licensee identified a need to provide a more formal flood penetration inspection and maintenance program. The licensee's mitigation strategy for internal flooding is not formalized in one response procedure, but is located in several other procedures, and these procedures only specifically identify permanently installed equipment. The station utilizes installed sump instrumentation and equipment, along with preventative compensatory measures when activities present an increased risk to internal flooding. This condition is captured in Condition Report 2011-2324 for which an action plan was developed, which includes the following: creation of an engineering design basis for internal flooding, designation and procurement of protection equipment, and formalization of the procedures for protecting the site from internal flooding.</p>
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**03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. Assess the licensee's development of any new mitigating strategies for identified vulnerabilities (e.g., entered it in to the corrective action program and any immediate actions taken). As a minimum, the licensee should have performed walkdowns and inspections of important equipment (permanent and temporary) such as storage tanks, plant water intake structures, and fire and flood response equipment; and developed mitigating strategies to cope with the loss of that important function. Use Inspection Procedure 71111.21, "Component Design Basis Inspection," Appendix 3, "Component Walkdown Considerations," as a guideline to assess the thoroughness of the licensee's walkdowns and inspections.**

Licensee Action	Describe the licensee's actions to assess the potential impact of seismic events on the availability of equipment used in fire and flooding mitigation strategies.
a. Verify through walkdowns that all required materials are adequate and properly staged, tested, and maintained.	Mitigation equipment and strategies were analyzed and inspections of plant equipment were conducted. In many cases, the mitigating equipment had previously been identified and inspected in Sections 03.01 and 03.03 of this temporary instruction.
	Describe inspectors' actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.

	<p>The inspectors reviewed the Updated Safety Analysis Report to determine the maximum flood level for the site and the required equipment to combat fires and floods. The inspectors reviewed the licensee's fire protection program and flooding mitigation procedures, including natural and destructive phenomena procedures. The inspectors independently walked down the licensee's equipment to ensure it was available and usable and to ensure that the procedures could be accomplished as written. These walkdowns included contingency response equipment, all external watertight doors, the walls of all external buildings for signs of degradation, the fire protection system diesel pumps, and the fire main header. The equipment was either seismically restrained or located in seismic structures.</p> <p>Discuss general results including corrective actions by licensee. Briefly summarize any new mitigating strategies identified by the licensee as a result of their reviews.</p> <p>The inspectors determined the need to further review the licensee's technical specification for electrical systems. Specifically, Technical Specification 2.7 does not specify any required off site or emergency power sources below 300°F. Additionally, the licensee identified the need to provide guidance when and how to safely purge hydrogen gas from the main generator during or following an emergency event.</p>
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### **Exit Meeting Summary**

On April 29, 2011, the inspectors presented the inspection results to Mr. D. Bannister, Chief Nuclear Officer, and other members of licensee management. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee**

R. Acker, Licensing Engineer  
S. Baughn, Manager, Nuclear Licensing  
A. Berck, Supervisor, Emergency Planning  
S. Gebers, Manager, Emergency Planning, Health Physics and Administration  
T. Giebelhausen, Manager, Operations Training and Simulator  
J. Goddell, Division Manager, Nuclear Performance Improvement and Support  
D. Guinn, Supervisor, Regulatory Compliance  
T. Nellenbach, Division Mmanager, Nuclear Operations

### **LIST OF DOCUMENTS REVIEWED**

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

#### **03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events**

<u>Number</u>	<u>Description or Title</u>	<u>Revision</u>
SAMG-ABBREV	Abbreviation	0
SAMG-ASSINST	Assessment of Instrumentation and Equipment for Severe Accident Management	0
SAMG-BD-B	Core Badly Damaged and Containment Bypassed (BD/B)	5
SAMG-BD-CC	Core Badly Damaged and Containment Closed and Cooled (BD/CC)	5
SAMG-BD-CH	Core Badly Damaged and Containment Challenged (BD/CH)	5
SAMG-BD-I	Core Badly Damaged and Containment Impaired (BD/I)	5
SAMG-CALCAID	Calculation Aids	3
SAMG-EX-B	Ex-Vessel and containment Bypassed (EX/B)	5
SAMG-EX-CC	Ex-Vessel and Containment Closed and Cooled (EX/CC)	5

<u>Number</u>	<u>Description or Title</u>	<u>Revision</u>
SAMG-EX-CH	Ex-Vessel and Containment Challenged (EX/CH)	5
SAMG-EX-I	Ex-Vessel and containment Impaired (EX/I)	5
SAMG-GLOSSARY	Glossary	0
SAMG-INTRO	Introduction	0
SAMG-PHASE 1	Initial Diagnosis	1
SAMG-PHASE 2	Verification of Diagnosis	0
SAMG-RESTOR	Restoration	3
SAMG-RESTORATT	Restoration Attachments	2
OCAG-1	Operational Contingency Action Guideline	13

#### Condition Reports

2011-2078      2011-2102      2011-2132      2011-2150      2011-2164  
2011-2165

#### 03.02 Assess the licensee's capability to mitigate station blackout (SBO) conditions

<u>Number</u>	<u>Description or Title</u>	<u>Revision</u>
EOP-07	Station Blackout	14
EOP-20	Functional Recovery Procedure	24
EOP/AOP Attachments	EOP/AOP Attachments	29

#### Condition Reports

2011-2110      2011-2305

#### **03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design**

<u>Number</u>	<u>Description or Title</u>	<u>Date / Revision</u>
USAR-2.7	Hydrology	11
PE-RR-AE-1001	Floodgate Installation and Removal	2
GM-RR-AE-1002	Flood Control Preparedness for Sandbagging	9

#### Condition Reports

2011-0609      2011-2072      2011-2324      2011-2331      2011-2336  
2011-2338      2011-2348      2011-2352      2011-2355      2011-2380  
2011-2386      2011-2448      2011-2451      2011-2470      2011-2471  
2011-2520      2011-2531      2011-2532

**03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events**

<u>Number</u>	<u>Description or Title</u>	<u>Date / Revision</u>
AOP-01	Acts of Nature	26
AOP-06	Fire Emergency	24

Condition Reports

2011-2341	2011-2562
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